



Unclassified





SECURITY CLASSIFICATION OF THIS PAGE (When Design)	
REPORT DOCUMENTATION PAGE	READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER 2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
(14) GS-4	
4. TITLE (and Subtitle)	5 TYPE OF REPORT & PERIOD COVERED
Goal Setting,	Technical Report
Control of the Contro	S: PERFORMING ORG. REPORT NUMBER
7. AUTHOR(e)	B. CONTRACT OR GRANT NUMBER(s)
Edwin A./Locke	N00014-79-C-0686 -
9. PERFORMING ORGANIZATION NAME AND ADDRESS	10. PROGRAM ELEMENT PROJECT, TASK
College of Business & Management	AREA & WORK UNIT NUMBERS
University of Maryland	NR-170-890
College Park, Maryland 20742  Controlling Office Name and Address	NZ REPORT DATE
Organizational Effectiveness Research Pro-	A
grams, Office of Naval Research (Code 452)	13 NUMBER OF PAGES
Arlington, Virginia 22217	9
14 MONITORING AGENCY NAME & ADDRESS(II different from Controlling Office)	15. SECURITY CLASS. (of this report)
1271	Unclassified
	15a. DECLASSIFICATION DOWNGRADING
APPROVED FOR PUBLIC RELEASE: DISTRIBUTION UNL	DTIC
17. DISTRIBUTION STATEMENT (of the obstract entered in Block 20, if different fro	OCT 2 3 1980
18. SUPPLEMENTARY NOTES	<b>E</b>
19. KEY WORDS (Continue on reverse side if necessary and identify by block number,	)
Goal Setting Supportiveness	
Task(s) Participation	
Incentives Scientific Management	
Management by Objectives Commitment	
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)	
This article briefly summarizes the history key elements of goal setting, including: goal goal choice, goal commitment, support elements, and practical considerations.	y of goal setting and the attributes, goal mechanisms,
1 8 6	

DD , FORM 1473

EDITION OF 1 NOV 68 IS OBSOLETE 5/N 0102-LF-014-6601

Unclassified SECURITY CLASSIFICATION OF

### GOAL SETTING

Edwin A. Locke University of Maryland

Accession For		
1	GRA&I	X
DDC I		
Unannounced		
Justification		
Ву		
Distribut; on/		
Codes		
	Avail and	/or
Dist	special	- 1
Λ	<b>i</b>	(
H	1 1	
• •		1

TECHNICAL REPORT GS-4

To Appear in C. Heyel (Ed.)

Encyclopedia of Management (3rd Edition)

Reproduction in whole on in part is permitted for any purpose of the U.S. Government. This report was sponsored by the Organizational Effectiveness Research Program, Office of Naval Research (Code 454), under Contract No. N00014-79-C-0680.

APPROVED FOR PUBLIC RELEASE: DISTRIBUTION UNLIMITED.

# GOAL SETTING

Managing a business, like managing one's life, requires a process of purposeful, goal-directed action. To better achieve the objectives of the organization, specific goals can be set for each individual employee. This can be done at any level or all levels of the organization from president to janitor.

# **HISTORY**

The first scientific approach to goal setting was developed by Frederick W. Taylor, the founder of Scientific Management, in the early 1900's. Based on the results of time and motion studies, he assigned blue collar workers daily goals or tasks. Work quantity and quality were measured daily and workers were given feedback indicating whether or not they attained their assigned tasks. Taylor's ideas (including his ideas on cost accounting) were later adapted by Pierre Dupont for use with managers at the Dupont Powder Co. and later at General Motors by Dupont, Donaldson Brown and Alfred P. Sloan [1]. This was the probable origin of the practice of Management by Objectives (although it was not so labeled until 1954 by Peter Drucker).

# THE GOAL SETTING PROCESS [2]

Goal setting does not have to be part of a wider management system to be effective. It can be used with single individuals, groups of individuals, work units or departments as well as with entire organizations. Extensive research has revealed a great deal about the goal setting process and what makes it work.

Goal Attributes. To be effective in improving performance, goals should be specific (preferably quantitative, e.g., "Reduce costs by 5%") and challenging, which means "difficult but reachable." It has been found that people trying for specific, challenging goals consistently outperform: individuals trying to "do their best," those with specific but easy goals, and those with no particular goals.

Goal Mechanisms. There are four major mechanisms by which goals affect task or work performance. First, goals direct attention and action. If a manager is given a goal to cut costs, then he or she will focus on this activity rather than on tasks with lower priority (e.g., recruiting, new product development). Second, goals mobilize effort and energy. Thus people will work harder to attain a challenging goal than to attain an easy one (e.g., to increase sales by 20% vs. to increase sales by 1%). Third, challenging goals increase task persistence. If goal commitment is adequate, people will keep working until the goal is reached. For example, more persistent effort will be required to reduce the error rate from 5% to 0% than to reduce it from 5% to 4%. Finally, goals may indirectly motivate the development of new strategies for goal attainment. Goals cannot always be achieved simply through hard work and persistence; often it is necessary to "work smarter" rather than harder [3]. Thus, for example, to increase sales may require a new marketing strategy or new product development rather than more effort to sell existing products.

Goal Choice. How is a manager to decide what specific goals to set? Frederick W. Taylor developed the most scientific system for repetitive manual work: time and motion study; it allows a reasonably precise calculation as to what constitutes a "fair day's work." However, all jobs (e.g., managerial jobs) do not allow for such exact estimates. Furthermore, employees sometimes resist such methods. An easily calculated and readily accepted alternative to time and motion study is to set as a goal the average previous performance of the individual or unit. Sometimes, however, the proper goal level is simply a matter of judgment; competent employees can be allowed to set their own goals (through delegation) or they can be set by joint agreement of supervisor and subordinate (through participation). Often there are external constraints such as contract deadlines or competitors' actions which dictate what goals must be met. Under a Management by Objectives system, of course, the formal goals of the organization (however derived) are the basis for setting the goals for each employee. Goal Commitment. Once goals have been set, the problem arises as to how to insure commitment to those goals. If there is no goal commitment, goals will not improve performance. Often the benevolent authority of an individual's boss is sufficient to gain acceptance of the assigned goals, especially if there is a relationship of mutual trust between manager and subordinate. (Contrary to frequent claims by social scientists, participatively set goals have not been shown to lead consistently to greater goal acceptance or accomplishment than assigned goals.) Supportiveness on the part of the boss may also be helpful. A

supportive supervisor or manager: listens to his or her subordinate, answers questions, helps with problems, and maintains a friendly atmosphere [4]. If a number of different individuals are doing the same or similar jobs, spontaneous competition usually arises among them, an element which fosters goal commitment because of the added incentive of beating someone else's performance. (Deliberately encouraging competition is a risky procedure, however, since the focus may become more on beating the other employees than on the success of the organization as a whole. Also chronic losers often give up, which they would not do if they were trying for a fixed standard that was suited to their level of experience and ability.) Money bonuses for goal accomplishment are a very effective method of facilitating goal commitment, since most people value money and want recognition in a tangible form. Once employees have a history of success in reaching their goals, acceptance of future goals is more easily attained.

Employees resist goal commitment typically for one of three reasons. They may feel that they cannot attain the goal because it is too difficult. Additional training and skill development plus encouragement will often overcome fear of failure. The goal, of course, actually may be too difficult in which case it should be lowered. Sometimes employees do not accept goals because they do not trust their bosses. Allowing employees to participate in setting goals may overcome some of this distrust and give them a greater sense of control over their fate.

Goals may also be rejected because employees do not believe that goal accomplishment is really considered important by the organization. They may believe that setting goals is just a lot of paper work that will be put into the files and forgotten. (In some cases, of course, they are correct; a good example is the recent fad toward the use of "instructional objectives" in the public schools. Typically teachers simply fill out the forms which are then filed, never to be seen again). A good way to convince employees that their goals are to be taken seriously is to base the employee's performance appraisal and rewards (e.g., pay) partly on goal attainment. Asking for periodic reports regarding goal progress is also an indication that the goals are to be taken seriously. Support Elements. While setting goals and getting employees committed to reaching them is necessary to motivate improved performance, a number of support elements must be provided to insure that this heightened motivation is translated into successful action. First, the employees must have the ability to attain their goals. Simply motivating ignorant, incompetent employees will not make them effective. Managers must insure that their selection techniques and training systems yield able and knowledgeable employees. In addition, every goal that involves anything more than extra effort should be accompanied by a carefully developed action plan or strategy for goal attainment. It was noted earlier that goals may motivate strategy development, but this is no guarantee that a sound plan will actually be developed. The boss's input, based

(presumably) on his or her greater knowledge, may be needed to insure that the action plan is adequate. Input from coworkers (as in team problem-solving) may also be valuable. Second, it has been found that goal setting only works when individuals are provided with feedback regarding their progress in relation to their goals. Without such feedback employees will not know if they are working hard enough or if the strategies they are using are appropriate. Feedback frequency should be based on need. For non-managerial jobs, daily feedback may be both appropriate and useful. For managerial jobs it may be practical only to provide feedback weekly, monthly or quarterly. Third, management must provide sufficient resources to get the job done. This may involve additional: equipment, people, time, money and/or expertise. Fourth, company policies must not block goal attainment. For example, rigid rules may prevent the development of innovative strategies. Company "politics" may prevent action plans from being implemented. Failure to give a degree of responsibility commensurate with the complexity of the goals to be attained may prevent the qoals from being reached.

Benefits and Pitfalls. When the goal setting process is carried out properly, numerous benefits can result. Productivity and performance quality should increase. Costs may decline. Role clarity may increase while role ambiguity is reduced. If goals are achieved, there will be increased satisfaction, pride in accomplishment, and self-confidence on the part of employees.

But goal setting is not without its hazards. For example, if hard goals are combined with high management pressure and

low supportiveness, employees may be tempted to take short cuts and even resort to dishonest practices (e.g., observe the recent scandals involving college athletic coaches). Also, aspects of the job which have not been translated into goals will typically be ignored. This, of course, is the purpose of setting goals: to direct action towards certain ends at the expense of others. But sometimes the ignored aspects of the job are still important to the organization. One way to solve this problem is to formulate goals for such previously ignored aspects. Finally, striving for goals entails the risk of failure. Employees who fail to reach their goals can become discouraged and dissatisfied. However, this problem can be mitigated somewhat by emphasizing progress toward the goals and by developing more appropriate action plans.

# SPECIALISTS NEEDED

Goal setting programs should be administered by an individual well versed in the goal setting literature. If no goal setting programs currently exist in an organization, hiring an outside consultant is advisable. Based on subsequent experience, organizations may then develop their own in-house capability for operating goal setting programs. However, if such programs are to succeed on a wide scale (as opposed to in a single unit or department) extensive support is needed from the highest levels of management.

Managers should be aware that goal setting programs are sometimes peddled under other names. For example, most "organizational behavior modification" programs consist of goal setting plus feedback described in the pseudo-scientific terminology of behavioristic psychology. Such programs often include many of the principles and procedures described in this article.

### COSTS

Goal setting programs are extremely cost effective. For example, one such program, developed by Dr. Gary Latham of the University of Washington with truck drivers at a forest products company, saved the company over \$250,000 [5]. If money incentives are used to aid goal commitment, this will increase the costs somewhat, but the benefits of such programs still should far exceed the costs.

# CONCLUSIONS

In the last eleven years alone there have been over 100 published studies on the effects of goal setting on performance in both laboratory and field settings. In 90% of the studies goal setting was effective in improving task performance [6]. This makes it one of the most effective and reliable motivational techniques known. The average goal setting program in an organizational setting achieves a 16% improvement in task performance; some achieve much more. In combination with money incentives, goal setting may achieve performance improvements in excess of 40% [7].

Edwin A. Locke College of Business and Management University of Maryland

### REFERENCES CITED

- [1] Wren, Daniel A., "The Evolution of Management Thought," (2nd edition) New York, Wiley, 1979.
- [2] Latham, Gary P., & Locke, Edwin A., "Goal-Setting: A Motivational Technique That Works," Organizational Dynamics, Autumn, 1979.
- [3] Vough, Clair F., "Tapping the Human Resource," New York, Amacom, 1975.
- [4] Latham, Gary P. & Saari, Lise M., "Importance of Supportive Relationships in Goal Setting," Journal of Applied Psychology, Vol. 64, 1979, 151-156.
- [5] Latham, Gary P., & Baldes, J. James, "The 'Practical Significance' of Locke's Theory of Goal Setting," Journal of Applied Psychology, Vol. 60, 1975, 122-124.
- [6] Locke, Edwin A., Shaw, Karyll N., Saari, Lise M., & Latham, Gary P., "Goal Setting and Task Performance: 1969-1960," Technical Report GS-1, University of Maryland, June, 1980 (unpublished).
- [7] Locke, Edwin A., Feren, Dena B., McCaleb, Vickie M., Shaw, Karyll N., and Denny, Anne T., "The Relative Effectiveness of Four Methods of Motivating Employee Performance," in K. Duncan, M. Gruneberg, and D. Wallis (Eds.) "Changes in Working Life: Proceedings of the NATO International Conference," London: Wiley, in press.

# END

# DATE FILMED